

Chugach National Forest Plan Revision Wild and Scenic Rivers Evaluation

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Purpose

The purpose of this document is to summarize:

- The review of rivers previously inventoried and evaluated for inclusion in the National Wild and Scenic River System (NWSRS) as part of the plan revision process completed in 2002.
- The process that was used to identify the eligible rivers and determine the suitability of the rivers for recommendation in the 2002 Record of Decision.
- The information obtained from Forest Service resource specialists, land managers, and other knowledgeable persons about possible changes to the outstandingly remarkable values (ORVs) of 15 river segments. Changes are identified for two rivers (Child's Glacier on the Copper River and Twentymile River).

Executive Summary

The Chugach National Forest Land and Resource Management Plan was revised in 2002 (2002 Revised Forest Plan). The 2002 Revised Forest Plan included an evaluation of rivers that flow through National Forest System lands to determine their eligibility and suitability for inclusion in the NWSRS. Wild and scenic rivers are managed to protect their free-flowing characteristics and their particular ORVs. Twenty-three rivers, in whole or in part, were deemed eligible to be recommended for inclusion in the NWSRS.

If a systematic inventory of eligible rivers has been conducted previously, additional river studies for revision of a land management plan need only be completed if changed circumstances warrant additional review of eligibility (USDA 2015). As a part of the current forest plan revision process, Forest Service staff determined that there have been no substantive changes to the ORVs identified for those rivers recommended for inclusion in the NWSRS and that there is no new information or changes to conditions that would change the decision for other rivers within the national forest.

Introduction

The NWSRS is a system of free-flowing rivers designated by Congress that offers outstanding natural, heritage, or recreational features and protects them for future generations. During forest planning, the Forest Service evaluates rivers that flow through National Forest System lands and recommends rivers suitable for inclusion in the NWSRS. Wild and scenic rivers are managed to protect their free-flowing characteristics and their particular ORVs.

For a river to be included in the NWSRS, it must meet eligibility and suitability tests. To be eligible, a river must be free flowing and possess river or river-related values that are judged to be “outstandingly remarkable.” An outstandingly remarkable value is defined as unique, rare, or an exemplary feature and is significant when compared with similar values from other rivers at a regional or national scale.

To be suitable, the benefits of designation should outweigh the disadvantages. It involves considering the land ownership in the area; the land uses that would be affected; public, state, and local government interest in the river’s designation; estimated costs; and any other issues raised during the planning process.

Eligible rivers are classified as wild, scenic or recreational based on the degree of access and amount of development along the river area. Designated river segments are classified and administered according to definitions in the Wild and Scenic Rivers Act:

Wild river areas: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

Scenic river areas: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines undeveloped, but accessible in places by roads.

Recreational river areas: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

As of 2015, Congress has not made a decision on the designation of the recommended wild, scenic, or recreational rivers within the Chugach National Forest. However, until a decision is made, the recommended rivers have been managed under separate land management prescriptions as described in the 2002 Revised Forest Plan (USDA 2002c). Many of the rivers found to be eligible but not suitable are managed under management area prescriptions that offer protection for their ORVs.

Wild and Scenic River Evaluations

Summary of the Analysis for the 2002 Revised Forest Plan

An extensive evaluation of rivers and glaciers was completed for the Chugach National Forest 2002 Revised Forest Plan (USDA 2002c). All named rivers and glaciers (more than 760) and many unnamed rivers within the national forest were examined and evaluated to identify ORVs that would make them eligible for inclusion in the NWSRS.

Forest Service resource specialists from each of the three ranger districts completed a *River Attributes Field Data Sheet* for each stream. Data sheets for the Cordova Ranger District show that this process began in 1995. The specialists ranked the potential ORVs from zero to 4. A ranking of zero indicated that the value was not present, 1: not significant, 2: locally significant, 3: regionally significant, 4: regionally or nationally significant. The guidelines for assessing these values are found in the Forest Service Handbook (FSH 1909.12 chapter 80). The values that were rated included:

- Scenic value
- Recreation value
- Geologic features
- Fish and wildlife values
- Historic values
- Cultural values
- Other (e.g., ecological values)

Following this analysis, 23 rivers, in whole or in part, were found to have one or more ORVs and were determined to be eligible for designation (see table 1). An interdisciplinary team then analyzed each of these streams to determine whether or not they were suitable for inclusion in the NWSRS. The team completed an *Eligible River Suitability Data Sheet* with standard criteria for making these evaluations. The suitability factors included:

- Characteristics that do or do not make the area a worthy addition to the NWSRS
- Current status of land ownership and use in the area, including the amount of private land
- Foreseeable uses of the land and water that would be affected by designation; values that would be lost or foregone if the area is not protected (the data sheets specifically addressed transportation, water, minerals/geology, timber, fish and wildlife, recreation/scenic, historic/cultural, and the effects of non-designation)
- Public, state, and local governmental interests
- Estimated cost of land acquisition and management as a wild and scenic river
- Other issues or concerns identified in the planning process; public comment and support
- Whether or not values would be best protected under the NWSRS or other land management prescriptions

In the 2002 Revised Forest Plan Final Environmental Impact Statement Record of Decision, the regional forester recommended nine of these eligible rivers, or segments, as suitable for inclusion in the NWSRS, a total of 82.4 miles (see table 1).

Table 1. Rivers and glaciers found to be eligible for inclusion in the NWSRS. Those marked with an asterisk (*) were deemed suitable. The regional forester recommended these suitable rivers for inclusion in the NWSRS in the 2002 Revised Forest Plan Final Environmental Impact Statement Record of Decision (USDA 2002b).

River Name	Outstandingly Remarkable Values	Miles of River Segment		
		Wild	Scenic	Recreational
Alaganik Slough	Historic, cultural sites		13	
Bear Creek	Geologic feature: large gold nuggets			3.4
Bering River and Lake	Scenery, recreation, and fisheries values.	6.6	25.2	
Canyon Creek	Geologic feature: narrow deep canyon.		6.8	
Cascade Creek	Visual feature: waterfall.	2		
Coghill River	Fish, recreation, scenery, visual features	11.5		
Columbia Glacier	Geologic feature : the glacier	19		
Copper River (lower)	Scenery, visual features, historic and cultural values, fish and wildlife habitat.	24.3	1	
Copper River (upper)	Scenery, visual features, recreation, fish	51.3		
East Fork Sixmile Creek *	Recreational whitewater boating, scenery and visual features.			5.6
Katalla River	Fisheries value	4.8	7.1	
Kenai River	Fisheries value			5.5
Martin Glacier	Geologic feature: the glacier	18		
Martin River and Lake	Scenery, visual features, geologic feature, fisheries, recreation values	24.5	1.8	
Nellie Juan River*	Recreational whitewater boating, scenery and visual features	9.6		
Nellie Martin River	Fisheries value	0.4	1.6	
Number One River	Recreational whitewater boating, geologic features associated with glacier and its retreat.	6.7		
Palmer Creek	Scenery and visual features		10.9	
Portage Creek*	Scenery, visual features, recreational values.			6.2
Portage Glacier	Scenery, visual features, recreational values.	4.7		

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Bering River and Lake	Scenery, recreation, and fisheries values.	6.6	25.2	
Canyon Creek	Geologic feature: narrow deep canyon.		6.8	
Cascade Creek	Visual feature: waterfall.	2		
Portage Lake	Scenery, visual features, recreational values.	2.3		
Russian River (lower)*	Fisheries, prehistoric cultural features, recreation.			4.9
Russian River (upper)*	Fisheries, prehistoric cultural features	12.0		
Sixmile Creek *	Recreational whitewater boating, scenery and visual features.			5.7
Snow River (lower)*	Scenery and visual features.		5.1	
Snow River (upper)*	Scenery and visual features.	18.7		
Twentymile River*	Synergistic effects of lake, river, and wetland complex. This provides fish and wildlife habitat, and recreational opportunities.		14.2	

Following an appeal of the 2002 Revised Forest Plan, the June 21, 2004 *Consolidated Decision for Appeals of the Chugach National Forest Revised Land and Resource Management Plan* directed the regional forester to reevaluate nine rivers or areas that had one or more values listed as outstandingly remarkable on the data sheets, but were not reported as eligible (see table 2). After further analysis, most of the values were found to be of only local significance, and only Childs Glacier was determined to be eligible, in its case, as a scenic river. It had been listed as having historic values, but it was determined that the historic Million Dollar Bridge was a feature associated with the Copper River, not the glacier, so the historic value was excluded. Childs Glacier has not yet been analyzed for its suitability for inclusion in the NWSRS.

Table 2. Additional rivers or areas reevaluated for eligibility for inclusion in the NWSRS. Only Childs Glacier was determined to be eligible.

River	Outstandingly Remarkable Value (rating)
Childs Glacier	Recreation (4); Scenic (4); Geologic (3)
Edwardes River	Fish and Wildlife (3)
Eyak River Watershed	Recreation (2/3)
Hinchinbrook Island	Historic/Cultural (3)
Montague Island	
Unnamed creek flowing into Rocky Bay	Historic/Cultural (3)
Unnamed creek flowing into San Juan Bay	Historic/Cultural (3)
Nichawak River	Fish and Wildlife (3)
Power Creek	Recreation (2/3); Scenic (2/3)
Rude River	Scenic (3)
Suny (or Sunny) Creek	Fish and Wildlife (3)

An assessment of the conditions and trends on the Chugach National Forest (USDA 2014) summarized the current status of the rivers recommended for inclusion in the NWSRS.

Since 2002, the nine recommended river segments and Childs Glacier have been managed according to the three management area prescriptions (Wild River, Scenic River, and Recreational River) developed to protect their free flowing characteristics, tentative classification, and outstandingly remarkable values for which they were recommended (see map 1).

2015 Review of Changed Circumstances

Because an extensive inventory and analysis of river segments was previously conducted, the responsible official has discretion to limit the focus of any subsequent review to those changed circumstances affecting the ORVs for rivers previously found eligible (USDA 2015).

To determine whether there had been any changes that would affect the eligibility of the rivers, resource specialists, program managers, special use permit administrators, and other knowledgeable Forest Service personnel were consulted. A summary of the consultations is available in the project file.

The 2002 Revised Forest Plan (USDA 2002c), along with the associated Final Environmental Impact Statement (USDA 2002d,e), Record of Decision (USDA 2002b), and appeal documents were reviewed for background information. The data sheets from the original eligibility analyses from the Cordova Ranger District, and the data sheets for the suitability analysis for the eligible rivers were reviewed as

well. Alaska Department of Fish and Game reports, State of Alaska Web sites, scientific literature, and internal Forest Service reports and databases were also used.

Findings of Change

This section reviews the changes that have occurred on the recommended rivers, Childs Glacier, and the rivers reevaluated following the 2002 Revised Forest Plan appeal (see table 3). The period of change started in 2002 when the Record of Decision was signed and ends at present. During the consultation process, Forest Service resource specialists mentioned changes in the levels of recreational use at Childs Glacier and Twentymile River. No other changes were identified. Discussion of the effects of these changes on the ORVs of these systems follow.

Table 3. Changes to outstandingly remarkable values at the recommended rivers, Childs Glacier, and the rivers reevaluated following the Forest Plan appeal. Those rivers marked with an asterisk (*) were recommended for inclusion in the National Wild and Scenic Rivers System.

River Name	Status	Change	Comments	Info. Source
Childs Glacier	Eligible as scenic	Yes	Recreational use has been reduced by the failure of a state highway bridge along the Copper River Highway, limiting access. Scenic and geologic values not affected.	D. Zastrow, ADOT, R. Behrends
East Fork Sixmile Creek*	Recreational	No	No changes.	K. Kromrey, J. Lang
Edwardes River	Not eligible	No	Reevaluation found that fish populations were not remarkably greater than other streams in the area. No change to this status.	USDAFS 2004b. K. Hodges. T. Sheridan
Nellie Juan River*	Wild	No	No change. River is in Wilderness Study Area and has been managed accordingly. Guided use appears to be low.	D. Ilse. SUP Outfitter/Guide use database.
Nichawak River	Not eligible	No	Reevaluation found that fish populations were not remarkably greater than other streams in the area. No change to this status.	USDAFS 2004b. K. Hodges. T. Sheridan
Portage Creek*	Recreational	No	No change. Guide use has declined.	D. Ilse. SUP O/G use database.
Power Creek	Not eligible	Yes	Scenic and recreation values reevaluated and determined to be locally significant. Hydroelectric facility completed in 2002 diverts flow, substantially reduces flow of a 150-ft waterfall.	USDAFS 2004b. K. Hodges
Rude River	Not eligible	No	After reevaluation, the scenic value was reclassified as locally significant. Views of glaciers and waterfalls do not stand out as being extraordinary in the region.	USDAFS 2004b.

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Nichawak River	Not eligible	No	Reevaluation found that fish populations were not remarkably greater than other streams in the area. No change to this status.	USDAFS 2004b. K. Hodges. T. Sheridan
Russian River (lower)*	Recreational	No	No change.	K. Kromrey. J. Lang
Russian River (upper)*	Wild	No	No change	K. Kromrey. J. Lang
Sixmile Creek *	Recreational	No	No significant change. Power line was relocated closer to Creek and parking lot for access to the creek was built in the watershed, but were placed so they are not visible to recreationists on the river.	K. Kromrey
Snow River (lower)*	Scenic	No	No change.	K. Kromrey
Snow river (upper)*	Wild	No	No change	K. Kromrey
Suny (Sunny) Creek	Not eligible	No	Reevaluation found that chum salmon populations, size, and run timing were not different than a number of other streams in the region.	USDAFS 2004b. K. Hodges. T. Sheridan
Twentymile River*	Scenic	Yes	Some change in recreation value but not significant. Guide use has increased since 2002. Wetlands, wildlife habitat, and recreation values not affected.	D. Ilse, J. Ilse. SUP O/G use database

Childs Glacier

Childs Glacier was determined to be eligible based on the outstandingly remarkable scenery, recreation, and geologic feature values. The geologic feature is the glacier, which terminates at the Copper River. As the river erodes the base of the glacier, large slabs of ice calve into the water. Recreational visitors view the calving from a Forest Service campground across the river. Rafters can get a closer view of the glacier from the river itself. A Forest Service trail on the other side of the Million Dollar Bridge leads to the glacier, where hikers can walk on the ice.

There are several changes that affect recreational use. The main change has been the 2011 failure of the state highway bridge at milepost 36 of the Copper River Highway. Several local businesses have Forest Service permits to provide boat access to the area. The Cordova Ranger District recreation planner estimates that seasonal use has decreased from 8,000 to 1,000 visitor use days (D. Zastrow, personal communication 2015).

The Alaska Department of Transportation estimated that bridge replacement would cost \$51 million and take four years to complete (ADOT 2014). At present, the state Web site states: "There has been a recent decision to close the project due to the lack of funding for design or construction" (ADOT 2015). The replacement will not occur in the foreseeable future.

There have been other changes that may or may not reverse on their own. Based on site visits and information from Alaska Department of Fish and Game employees at a nearby fish counting station, the Cordova Ranger District recreation planner stated that Childs Glacier did not calve into the Copper River in 2014, even though water levels were normal (D. Zastrow, personal communication 2015). Seeing the ice splash into the river, sending large waves across the river, and potentially washing salmon onto the shore, is a large part of the recreational attraction. Apparently, a sandbar has built up in front of the glacier that prevents the river from eroding the base. One other change is that the hiking trail to the glacier has been flooded by beaver activity.

Although recreational use has diminished, the scenery and the glacier remain. The boat ride may add to the recreational experience for some visitors. These changed circumstances are not substantial enough to warrant a change in eligibility status. Forest Service staff is evaluating potential changes to the existing facilities of the site given the reduction of use at the site and the current condition of some of the facilities.

Twentymile River

There is some perception that recreational use has increased in the Twentymile River area. An internal Forest Service report (USDA 2012) states that motor vehicle use has increased, but it does not cite a data source for this statement. Authorized guided recreation use reported from 101 to 146 user days from 2000 to 2002. This use increased to 1,221 in 2007 and decreased to 859 in 2013. No recorded information is available for general public use of this area.

The internal report (USDA 2012) states that the ORVs of the area have not been affected; these values are the unique wetland ecosystem, fish and wildlife habitat, and the associated recreational opportunities. Another change is that the guided use for this area has diversified, with more winter and spring activities, such as helicopter or ski-plane trips to Carmen Glacier at the head of the valley (USFS Outfitter Guide Use database). Thus, the use is not concentrated in the summer or only on the river, as it appears to have been in the past.

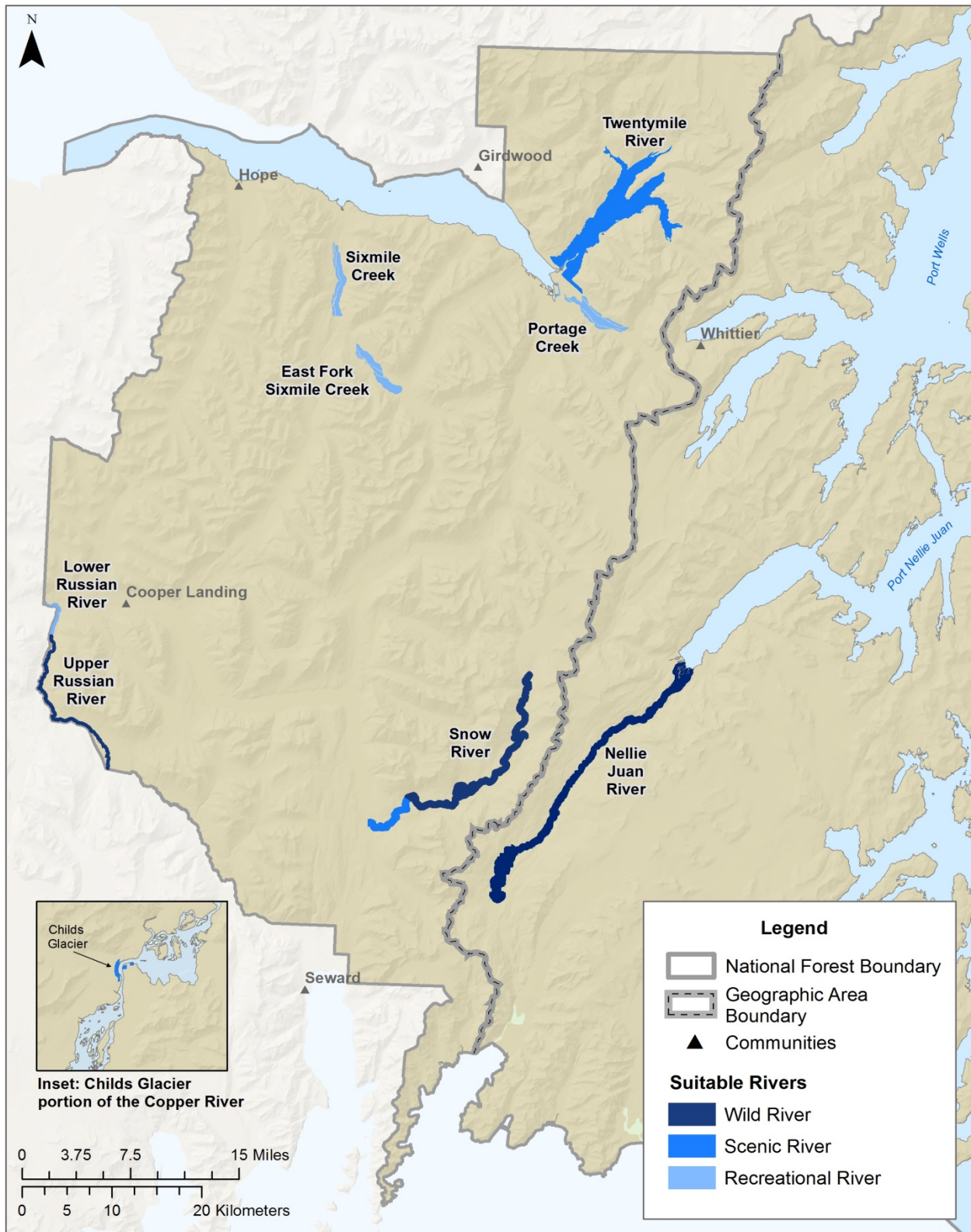
Additional information on wildlife was provided by the wildlife biologist for the Kenai Peninsula zone. Wildlife values and habitat appear to be intact. Beluga whales, listed as endangered in compliance with the Endangered Species Act, forage regularly in Twentymile River. The whales move up the river from the marine waters of Turnagain Arm, following schools of fish, primarily eulachon and salmon. Unlike other rivers in the area, Twentymile River is not constricted by roads or structures, allowing the river to meander naturally. As the river shifts, new vegetation grows in the abandoned channels and floodplains, providing more and better forage for moose than in neighboring systems. The emergent vegetation in the shallow braided channels provides crucial nutrient-dense forage for moose in the spring, which is particularly important after the winter (J. Ilse, personal communication 2015).

Thus, regardless of changes in recreation use, the ORVs in the Twentymile River area appear to have been preserved by the Scenic River management prescription. This review also indicates that preserving the free-flowing qualities of the river is important for moose habitat.

Summary

Extensive consultation with Forest Service staff indicates that there have been no substantial changes to the ORVs of the rivers recommended for inclusion in the NWSRS in the 2002 Revised Forest Plan Record of Decision. Childs Glacier, found to be eligible, has experienced a decline in recreational use because of a state highway bridge failure, but the scenic and geologic values remain largely unchanged. Twentymile River has experienced an increase in recreational use that includes expansion of guided recreation use into the winter and spring seasons, but the wetlands, wildlife habitat, and recreation values remain unchanged. The other streams that were reevaluated following appeal of the 2002 Revised Forest Plan were found to be ineligible. No changes or new information have been identified that would make those systems eligible.

Map 1. River segments of the Chugach National Forest deemed suitable and recommended for inclusion in the NWSRS. The Copper River segment at Childs Glacier is deemed eligible for inclusion.



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Behrends, Robert. Cordova Ranger District Public Services Staff Officer (Recreation, Lands, Minerals, Heritage). January 23, 2015. We discussed the current use at Childs Glacier following the wash-out of the bridge at Mile 36 of the Copper River Highway and the status of the trail to the glacier.

Hodges, Ken. Prince William Sound Fisheries Biologist. Personal observations, database research, internet searches. January-February 2015. I looked for fish population changes in Alaska Department of Fish and Game databases, and obtained miscellaneous information from Forest Service databases and unpublished reports.

Ilse, David. Glacier Ranger District Recreation, Lands, Minerals, and Heritage Program Manager. January 28, 2015. We discussed whether the NWSRS eligible rivers on the Glacier Ranger District, which includes western Prince William Sound, had experienced significant change. This included, in particular, effects of recreation use in the Twentymile River system.

Ilse, Jessica. Kenai Peninsula Zone Wildlife Biologist. February 12, 13, 2015. Through an exchange of e-mails, we discussed wildlife issues on the rivers eligible for the NWSRS. She provided additional wildlife information of Twentymile River – use by beluga whales, moose forage.

Kromrey, Karen. Seward Ranger District supervisory natural resource specialist. January 20, March 12, 2015. During telephone conversations and via e-mails, she reported that there have been no significant changes to the recommended rivers on the Seward Ranger District. Mitigation measures for the relocation of a power line and construction of a parking lot near Sixmile Creek made it so that these were not visible to river users.

Lang, John. Kenai Peninsula Zone Fisheries and Aquatic Biologist. January 22, 2015. We discussed fisheries values and habitat. He did not think that there have been changes or effects to aquatic values in the Kenai Peninsula streams.

Zastrow, David. Recreation Planner. Cordova Ranger District. January 12, 2015. David provided information on recreational at Childs Glacier, changes on the glacier calving into the Copper River, and the status of the trail to the glacier.